

ABSTRACT

A flow regulating valve (11), which has a valve disk (11b) operably disposed in a flow channel and is capable of regulating the flow of fluid according to the valve opening degree of the valve disk (11b), is characterized by comprising a stress detecting means (13) for detecting the flow-channel-direction force component of a load applied to the valve disk by the fluid, and a valve opening degree detecting means (12) for detecting the degree of opening of the valve disk. The flow rate calculating means (14) finds the flow rate (Q_m) from the stress (f_m) obtained from the stress detecting means and from the valve opening degree (θ_m) obtained from the valve opening degree detecting means. A control means (15) controls a valve disk driving means (18) on the basis of the flow rate to drive the valve disk for opening and closing. This makes it possible to find the flow rate with higher sensitivity and accuracy than in the prior art, the construction being compact and simple, providing stabilized data.